

## ABSTRACT

The stop ring having a surface nearly vertical to the rotational center axis, which is projected at the inner periphery of the hollow cylinder of the rotor section, and the stepped surface of the fixed shaft secured on the chassis are opposed to each other with a predetermined slight clearance provided therebetween. The clearance is filled with magnetic fluid, and further, a permanent magnet is disposed on the chassis, opposing to the other surface of the stop ring.